

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018296**Date Inspected:** 24-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

WELDING:**Segment 11DW ~ 11EW**

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW11C-009; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate Transverse Splice Weld; The Critical Welding Repair Report (CWRR) was B-CWR2269. ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 1G (1F) FCM-Repair-1. See attached photo for further details.

Segment 11DE ~ 11EE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE11A-010; located On Orthotropic Box Girder (OBG) Edge Plate

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to Edge Plate Transverse Splice Weld; The Welding Repair Report (WRR) was B-WR17689. ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW 1G (1F) FCM-Repair-1. See attached photo for further details.

NDT:

Cross Beam 15

This QA Inspector performed Ultrasonic Testing (UT) Verification inspection of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations verified are as follows.

SEG072D-074,
SEG072D-092,
SEG072D-128,
SSD24-PP104.5-168
SP745-001-045, 047
SP507-001-052
DP695-001-021
EP141-001-031
SP685-001-074

Nondestructive testing (NDT) notification No. 07479

Segment 11BW ~ 11CW

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

SSD10A-PP98-264,
SSD12A-PP100-260,
SSD16-PP98-260,
SSD18-PP100-260,
SSD18-PP106-260.

Nondestructive testing (NDT) notification No. 07471

HEAT STRAIGHTENING:

This QA Inspector observed the following work in progress:

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ZPMC personnel heat straightening Orthotropic Box Girder (OBG) member identified as Segment 11DE Panel Point 106 Longitudinal Diaphragm. Distortion appeared to be caused by Welding. ZPMC Quality Control (QC) inspector identified as Mr. Wang Li Yang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report HSR1 (B) 9552.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhune,Manoj

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer